

The Seeding of Wheat

Correctly Proportioned Fertilizers and Good Seed
Are Important Factors in Increasing the Yield

By C. B. Hutchison, Assistant Professor of Agronomy, College of Agriculture, U. of Mo.

Wheat responds to an application of fertilizer more freely than any other field crop grown in Missouri. In general, it responds most strikingly to the application of nitrogen and phosphorus, and fertilizers of this nature nearly always give good returns. The results secured on the university experiment fields in various parts of the state show that on the average to good uplands the use of bonemeal

The Use of Good Seed.

Another factor which controls the yield of the wheat crop is the seed, and only good seed of some variety best suited to one's locality should be used.

The experiment station has been testing wheat varieties for a number of years, both at Columbia and by means of co-operative experiments throughout the state. These experi-



On this experiment field the plot on the left received no fertilizer and yielded 9.1 bushels per acre. The plot on the right was treated with a complete fertilizer and yielded 18.2 bushels per acre.

or other phosphatic fertilizers with wheat is advisable, since most Missouri soils are lacking in available phosphates. Steam bonemeal should be used and an application of 125 to 150 pounds, made with a fertilizer drill, as the wheat is sown.

On the lands that have been worn by continued cropping the use of a complete fertilizer containing 3 to 4 per cent nitrogen, 8 to 10 per cent available phosphoric acid and 3 to 4 per cent potash, applied at the rate of 125 to 150 pounds to the acre, is good. Another fertilizer that will bring good returns on these thin lands is one containing around 2 per cent nitrogen, 8 to 10 per cent available phosphoric acid and 2 to 3 per cent potash.

This is a lower grade fertilizer than the first one mentioned and should be used at a little heavier rate, say from 150 to 200 pounds per acre. These fertilizers will not only increase the yield of the wheat crop, but will aid materially in getting a stand of grass where these crops follow the wheat.

INCREASING WHEAT YIELD

PREPARING SEEDBED SO AS TO INCREASE YIELD IN MISSOURI.

By C. B. Hutchison, Assistant Professor of Agronomy, University of Missouri.

The average yield of wheat in Missouri for the past ten years has been about 15.7 bushels per acre. It requires approximately 13 bushels of wheat at the average November price for the last decade to meet this expense, together with that of taxes, interest on the investment and the value of plant food removed from the land.

This evidently means that there are a great many farmers in the state who are actually growing wheat at a loss. Of course, there are sections where wheat is especially adapted, where much better yields than these are obtained, but at the same time there are many farms where the yield of wheat is not what it should be, and where its growing has not been very profitable.

It is, of course, realized by many farmers that the wheat crop, as they grow it, is not in itself a very profitable one, but it fits into the rotation so well and is of such importance as a nurse crop for grass and clover that it is often grown for these reasons.

There is no reason why wheat should not be made a profitable crop in practically every section of this state, and close attention to those factors controlling the profitable production of the crop will aid materially in increasing its value and importance throughout the state. It is to some of these factors that the reader's attention is directed at this time.

Preparation of the Seedbed.
Wheat ground should be plowed early and fairly deep. Where the

Origin of Present-Day Games.
Though we get our games of tennis from the eastern countries, most of our games of bat and ball come down to us from the ancient north. Ring games and games in which light objects are thrown come also from forest countries, where the spear was a familiar weapon. But all of them alike appear to revert in origin to early experiences of the race by which they worked out their salvation.

Religion Shown by Sacrifice.
In every age a test of religion has been its power to call out sacrifice. The great temples of the past could be built only by individual self-sacrifice. The direction of self-denial must be towards the noblest and most unselfish ends, putting the good of others in the place of self-indulgence.—The Christian Register.

Flash.
All the riding hard, shooting true and dying game—poor ethics of the opeh—had not brought a crumb, not a crumb, of the real bread of life.—Will Livingston Comfort.

FARM STOCK

POLAND CHINA HOGS EXCEL

Most Numerous in United States and Particularly in Corn Belt—Good Feeders and Rustlers.

Of all breeds of hogs Poland Chinas are the most numerous, at least in the United States, and particularly so in the corn belt. Having originated in southwestern Ohio, they are well suited to the needs of corn belt farmers, and it is not surprising that Poland China hogs are to be found on almost every farm, says a writer in the Rural New Yorker. These hogs are fine of bone, neat of frame, mature early and fatten easily; yet they are not toy pigs, adopted for show, principally, but are a lusty lot, being good rustlers, good feeders and of good constitution. The illustration shows a fair specimen of the small type of Poland China, the



Poland China Boar.

kind that will weigh 200 pounds at six, seven or eight months of age when in market condition. A seven-month-old pig weighing 200 pounds is easily produced under usual farm conditions, and at a good profit, too, as pigs of such weights bring the highest market prices.

During the present year hogs of any weight have sold at good prices, but fat pigs weighing from 175 to 200 pounds sold for a good premium over heavier ones, the reason being that hams and sides from such pigs, being small, are more easily and quickly cured. Such a policy on the part of the packers avoided having to hold high-priced meat long with a risk of a slump in price. With prospect of more pigs coming on farmers were quite willing to sell light-weight hogs at the good prices they commanded, and the Poland China and other small types of hogs peculiar to the corn belt made such a policy possible and profitable.

A fault of the Poland Chinas is their small litters. However, statistics show that Poland China litters average but two less than Duroc Jersey litters, the numbers being about seven and nine respectively. The small litters of hogs are as free from disease as are the larger ones, and so-called immunity from cholera is a myth unless that immunity has been secured by the proper administration of cholera serum; the breed or type is of no importance so far as disease is concerned.

CARING FOR BRUISED WOUNDS

Injuries to Horses' Legs Are Serious and Should Be Treated So as Not to Leave Scar.

Bruised wounds do not require a great amount of attention, since they are usually protected by the skin, and germs cannot find their way in to cause much trouble. To keep down inflammation, it helps to bathe the skin with a solution made by dissolving two tablespoonsful of lead acetate in a quart of water.

Leg wounds in horses are a rather serious matter, since they are likely to leave a blemish which will lower the value. It is important in treating them to secure a healing which will be so perfect that no one will suspect that a wound has ever been there. For such wounds one veterinarian suggests the following: Clean the wound with a wash composed of one tablespoonful of acetate of lead, one tablespoonful of sulphate of zinc, four tablespoonsful of tincture of arnica, and one quart of water. This wash should be used every day or so the first day and three or four times daily thereafter. The object is to keep the wound, while healing, lower than the surface of the skin. If it pushes up, bichloride of mercury, as much as can be put on the surface of a dime, should be placed on the sore. It is said that leg wounds thus treated will heal over, leaving no blemish.

Contentment and Health.
When planning for grain crop and live stock improvements don't forget that the fruits and vegetables for the farm means more contentment and better health.

Unfit Work for Mares.
Breaking ground with a big plow or working a gang of heavy stock is hard work and a mare well along in gestation should never be used for this purpose.

Whaling at Natal.
The whaler Egeland the other morning brought in the first humpback whale captured in Natal this season. It was a good whale and very fat. On a second visit to the ocean the same whaler captured a blue whale 70 feet long, which landed in the evening. Apparently the baleen whales are early this year.—Natal Mercury.

Pessimistic.
The best luck any man can have is never to have been born; but that seldom happens to anyone.

SUFFERED AWFUL PAINS

For Sixteen Years, Restored To Health by Lydia E. Pinkham's Vegetable Compound.

Moretown, Vermont.—"I was troubled with pains and irregularities for sixteen years, and was thin, weak and nervous. When I would lie down it would seem as if I was going right down into some dark hole, and the window curtains had faces that would peep out at me, and when I was out of doors it would seem as if something was going to happen. My blood was poor, my circulation was so bad I would be like a dead person at times. I had female weakness badly, my abdomen was sore and I had awful pains."

"I took Lydia E. Pinkham's Vegetable Compound and used the Sarsaparilla Wash and they certainly did wonders for me. My troubles disappeared and I am able to work hard every day."—Mrs. W. F. SAWYER, River View Farm, Moretown, Vermont.

Another Case.
Gifford, Iowa.—"I was troubled with female weakness, also with displacement. I had very severe and steady headache, also pain in back and was very thin and tired all the time. I commenced taking Lydia E. Pinkham's Vegetable Compound and I am cured of these troubles. I cannot praise your medicine too highly."—Mrs. IMA MILLER, SLAIG, Gifford, Iowa.

Make the Liver Do its Duty

Nine times in ten when the liver is right the stomach and bowels are right. CARTER'S LITTLE LIVER PILLS gently but firmly compel a lazy liver to do its duty.

Cures Constipation, Indigestion, Sick Headache, and Distress After Eating. SMALL PILL, SMALL DOSE, SMALL PRICE. Genuine must bear Signature.

Wm. Wood

CHICKEN, AND AGAIN CHICKEN

Confederate Veteran Has His Own Ideas of What Should Constitute a Perfect Menu.

"Speaking of fried chicken, hot biscuit, and peach cobbler," said the Confederate veteran, "you may recall Gen. Robert E. Lee's famous dictum: 'Bring me fried chicken. Not one fried chicken, not two fried chickens. Just fried chicken—unlimited fried chicken.'"

"Corn fritters and sweet potatoes are a part of fried chicken in my opinion. 'Some people lay great stress on the hot biscuit casualty list, but I am willing to take two dozen risks at a sitting in case the biscuit is small, flaky, white inside like snow, hot, with plenty of firm, prime butter. 'Peach cobbler is best served in a soup bowl, and it should never fill the bowl. There should be always a pitcher of sauce flavored with vanilla, wine, and highly sweetened. 'The sauce never has enough wine in it. To overcome this defect pour a quantity of the sauce over the cobbler and then add a wine glass full of old Burgundy. 'O, yum!'"

WATER BLISTERS ON FACE

Smithville, Ind.—"Six months ago our baby girl, one year old, had a few red pimples come on her face which gradually spread causing her face to become very irritated and a fiery red color. The pimples on the child's face were at first small watery blisters, just a small blotch on the skin. She kept scratching at this until in a few days her whole cheeks were fiery red color and instead of the little blisters the skin was cracked and scaly looking and seemed to itch and burn very much. 'We used a number of remedies which seemed to give relief for a short time then leave her face worse than ever. Finally we got a cake of Cuticura Soap and a box of Cuticura Ointment. I washed the child's face with very warm water and Cuticura Soap, then applied the Cuticura Ointment very lightly. After doing this about three times a day the itching and burning seemed entirely gone in two days' time. Inside of two weeks' time her face seemed well. That was eight months ago and there has been no return of the trouble.' (Signed) Mrs. A. K. WOODEN, Nov. 4, 1912. Cuticura Soap and Ointment sold throughout the world. Sample of each free, with 32-p. Skin Book. Address post-card 'Cuticura, Dept. L, Boston.'—Adv.

Flashlights.

It takes about a week for a girl's left arm to get used to carrying an engagement ring.

Hard work is the best pavement you can lay for luck to get to your doors. About the best thing that can happen to a young man is to have their wives carry the family pocketbook. It's tough to be broke right after a vacation, but it's tougher still to be broke just before one.

And here we are at the eighteenth hole, as the golfers say.—Detroit Free Press.

Cuckoo Reformation.
A remarkable case of reformation on the part of two old cuckoos is reported by Col. A. M. Blake from his estate at Welwyn, Herts, England.

The colonel states that he found two young cuckoos with the parent birds in faithful attendance. As is generally known, the regular habit of the cuckoo is to lay its eggs in the nests of other birds, leaving the rearing of their offspring to perfect strangers.

This is said to be the third successive year that cuckoos have brought up their young at Welwyn.

Refuge in Confusion.
"I suppose that by this time your constituents fully understand your position?"

"No," replied Senator Sorghum, "but I think I have explained it at sufficient length to prevent them from making any further attempts to comprehend it."—Washington Star.

Everything Relative.
Madge—This summer seems to be much cooler than last.

Marjorie—You must remember, dear, that you're not wearing so many clothes.—Judge.

LEFT THE ATTORNEY SMILING

Probably Judge, With a Little Thought, Would Have Expressed Himself in Somewhat Different Manner.

There was at one time in Georgia a judge who had many duties beside his legal ones to perform, but who never for a moment forgot that he "embodied the law" under any and all circumstances.

On one occasion he was called upon to act as auctioneer to dispose of some merchandise left by a dry goods merchant who had died some time before.

During the auction one of the bidders created a disturbance, and finally the exasperated auctioneer, assuming his character as judge, fined the man \$50, and sent him to jail for contempt of court.

An attorney made an application to remit the fine and release the prisoner, on the grounds that there had been no contempt of court. He maintained that the judge when acting as auctioneer was not a court, and therefore was not liable to contempt.

The judge heard this application presented with rising wrath, and assuming all the dignity which he possessed, he glared fiercely down upon the diminutive attorney.

"Sir," said he, in stentorian tones, "I would have you know that I am judge of this place under any and all circumstances; I am judge all the time, sir, from the rising of the sun to the going down of the sunset. And as such," shaking a forefinger at the attorney, "as such, let me tell you, sir, that I am always and everywhere an object of contempt."—National Monthly.

NOT PART OF GIRL'S DOWER

Information That Probably Did Much to Check Infatuation of Love-sick Youth.

Young Tom Toote was spending a holiday in the country, and had been invited to the beautiful home of a sweet young thing named Agnes.

"What a charming place!" he said enthusiastically to Agnes' proud paternal parent. "Does it go as far as those woods over there?"

"It does," remarked the somewhat unsympathetic P. P. P.

"Ah," said Tom, still cheerily, "and to that old stone wall over there, sir?"

"It does," came the gruff answer; "and it goes as far as the river on the south, and to the main road on the north."

"Beautiful!" put in Tom. "Yes," went on the old man; "but it doesn't go with Aggie!"

Then Tom faded peacefully from view.

Rocking-Chair Signs.

An observant Archibald woman says she can tell from the way a woman rocks on her front porch what condition the house behind her is in. If she sways back and forth with a floppy, comfortable motion, plumping both feet down in a relaxed sort of way, then everything about the house is absolutely clean and neat. But if she rocks in little nervous jerks, tapping her feet down at short and irregular intervals, it signifies that there are unmade beds behind her and stacks of unwashed dishes and dusty floors.—Archibald Globe.

Mrs. Winslow's Soothing Syrup for Children teething, softens the gums, reduces inflammation, allays pain, cures wind colic, and is the best remedy.

Father's Plan.

It was in a suburban town and the good minister had taken his class of boys on a little picnic out in the woods.

Each was supplied with a basket of fruit and sandwiches, and as they sat down in a picturesque spot to appease their sharpened appetites, the minister asked:

"Now, boys, what is the best and most appropriate time to thank the Lord?"

The boys looked at each other in silent questioning.

"What does your father do when he sits down to his meals?"

One of the lads, a little red-haired chap, promptly answered:

"Cuss the cook."

WHENEVER YOU NEED A GENERAL TONIC - TAKE GROVE'S

The Old Standard Grove's Tasteless chill Tonic is Equally Valuable as a General Tonic because it Acts on the Liver, Drives Out Malaria, Enriches the Blood and Builds up the Whole System. For Grown People and Children.

You know what you are taking when you take Grove's Tasteless chill Tonic as the formula is printed on every label showing that it contains the well known tonic properties of QUININE and IRON. It is as strong as the strongest bitter tonic and is in Tasteless Form. It has no equal for Malaria, Chills and Fever, Weakness, general debility and loss of appetite. Gives life and vigor to Nursing Mothers and Pale, Sickly Children. Removes Bilioussness without purging. Relieves nervous depression and low spirits. Arouses the liver to action and purifies the blood. A True Tonic and sure appetizer. A Complete Strengthening. No family should be without it. Guaranteed by your Druggist. We mean it. 50c.



Watch Your Colts

For Coughs, Colds and Diarrhea, and at the first symptoms of any such ailment, give small doses of that wonderful remedy, now the most used in children.

SPON'S DISTEMPER COMPOUND

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It is better to profit by your own strength than by the weakness of others.

Perhaps ignorance and bliss are a better pair to draw to than folly and wisdom.

His Reason. "Don't take notice of the cook, dear."

"I have to. She's just given it."

Difference of Opinion. "I like to see a young fellow settling down."

"I would rather see him settling up."

His Trade. "Our apothecary is a poet."

"Why shouldn't he be? Isn't poetry a drug in the market?"

Sure Sign. Knicker—Baby seems left-handed. Mrs. Knicker—Heavens, she must be engaged to somebody already.

Bankrupt. "Everything she had went at auction."

"Public sale?" "No, bridge."—Judge.

The Reason. "Why are some people so afraid of the opinion of posterity?"

"Because posterity belongs to the class of people always after us."

Not on His List. "Do you owe your downfall to De-mo-rum?" asked the prison warden. "I never heard of the brand," replied the convict.—Buffalo Express.

Tact. "Of course these pies are not like 'Not a bit, dear. Poor mother never the ones your mother used to make. er could make pies fit to eat."

Too Bad. The Dentist—Let me see! I'll have to treat four teeth—eight teeth—eighteen teeth—

Mr. Pildo—Hold on! Four teeth, eight teeth, eighteen teeth! What do you think I am—a comb?—London Answers.

Policies. "Have you outlined your policy to your constituents?"

"No," replied Senator Sorghum; "I am still looking over the policies my constituents have outlined to me, trying to decide on which I had better select."—Washington Star.

Why He Loved Her. "Yes, young man, I know you! You've been in love with my daughter ever since you discovered that she was an heiress."

"But, my dear sir, you wouldn't have me marry a poor girl, would you? Why, I can't even support myself!"—Life.

WINCHESTER

BIG GAME CARTRIDGES

The time of all others when reliable cartridges are invaluable is in big-game hunting. A miss-fire, an inaccurate cartridge, or one having poor penetration may mean the loss of a coveted trophy or even injury to the hunter. Winchester, the W brand of cartridges, smokeless or black powder, can always be relied on to be sure fire, accurate, and to have speed and penetration. You can help

MAKE YOUR HUNT A SUCCESS BY USING THEM.

W. L. Douglas shoes are not for sale in your vicinity. Order direct from the factory. Shoes for every member of the family, at low prices. Free. Write the Winchester Shoe Co., 100 N. 1st St., St. Louis, Mo. It will show you how to order by mail, and why you can save money on your footwear.

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